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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/379,017	08/23/1999	CHEE H. CHEW	MS1-319US	9770

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EXAMINER

AHMAD, ANWAR

ART UNIT PAPER NUMBER

2127

DATE MAILED: 10/24/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/379,017

Applicant(s)

CHEW, CHEE H.

Examiner

Anwar Ahmad

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on August 23, 1999.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

1. This office action is in response to an application filed on August 23, 1999. Claims 1-31 are presented for examination.

Drawings

2. Applicants are requested to not PTO-948 concerning notice of draftman's patent drawing review. However, correction of the noted defect can be deferred until the application is allowed by the examiner. Applicants are reminded of the provision of MPEP 608.02(q) and (r) regarding a separate letter to the chief Draftsman.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claim 1-11, 13-31 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Notenboom et al.

Regarding Claim 1, 13, 19, 30 Notenboom et al teaches:

A method of reclaiming resources used by computer application programs executing on a computer, the method comprising:

identifying computer application programs executing on the computer (applications or processes executing on a host processor, Col.3 15-20)

assigning a priority value to each of the identified computer application programs (user thus is able to designate that particular operations are to take precedence over others, Col.6 40-

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41), wherein the priority value is determined based on a plurality of characteristics of the identified computer application programs (prioritizes according to user preferences, Col.3 55-56); and

automatically terminating the computer application program with the smallest priority value (terminate one or more processing tasks of lower priority, Col.3 38-41).

Regarding Claim 3,27 Notenboom et al teaches:

identifying computer application programs executing on the computer that are core applications, wherein core applications are not terminated regardless of priority value (the co-processor resource manager excludes the processing task from eviction, Col.3 60-65)

Regarding Claim 5,23 Notenboom et al teaches:

A method as recited in claim 1, wherein each characteristic of the identified computer application programs has an associated weighting factor indicating the importance of the characteristic (user can rank the service classes, Col.3 50-55).

Regarding Claim 6 Notenboom et al teaches:

A method as recited in claim 1, wherein the characteristics of the identified computer application programs include average launch times for the computer application program (resources include processing capacity, Col.6 20-25)

Regarding Claim 7 Notenboom et al teaches:

A method as recited in claim 1, wherein the parameters characteristics of the identified computer application programs include average memory usages of the computer application programs (resource include memory, Col.6 20-25)

Regarding Claim 8 Notenboom et al teaches:

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A method as recited in claim 1, wherein the parameters characteristics of the identified computer application programs include classes associated with the computer application programs (a plurality of service classes, Col.6 30-35)

Regarding Claim 9 Notenboom et al teaches:

A method as recited in claim 1, wherein the parameters characteristics of the identified computer application programs include frequencies of usage of the computer application programs ("most recent request", Col.2 20-25)

Regarding Claim 10 Notenboom et al teaches:

A method as recited in claim 1, wherein the parameters characteristics of the identified computer application programs include the amount of data stored on the computer by the computer application programs (data transfer to perform or implement operations, Col.5 60-65)

Regarding Claim 11,24,31 Notenboom et al teaches:

A method as recited in claim 1, further comprising:

assigning values to the characteristics of the identified computer application programs (user can rank the service classes in a desired priority);

wherein the priority value for a particular computer application program is determined by adding together the characteristic values of the particular computer application (user adjusts parameters, Col.6 35-40 and adds the subject node, Col.12 60-65)

Regarding Claim 14 Notenboom et al teaches:

A method of terminating a computer application program executing on a computer, the method comprising:

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determining whether the computer application program being terminated is in modal state in which it waits for a response from a user (responsive to user input, Col.16 25-30 and terminate one or more processing tasks of lower priority, Col.3 35-40)

if the computer application being terminated is in a modal state, then providing a default response to the computer application program in lieu of a response from a user, wherein the default response takes the computer application program out of its modal state (responsive to user input, Col.16 25-30 and by default, Col.6 35-40); and

terminating the computer application (terminate one or more processing tasks of lower priority, Col.3 35-40).

Claim 25 is rejected for the same reasons as claims 6-10.

Regarding Claim 26 Notenboom et al teaches:

An apparatus comprising:

one or more processors (processor and co-processors, Col.1 15-20)

at least two application programs that are executed concurrently by the one or more processors (applications or processes executing on a host processor, Col.3 15-20); and

an operating system that is executed by the processor (operating system, Col. 50-55);

wherein the operating system is configured to assign a priority value to each application program being executed by the processor (service classes are ranked in order of priority, Col.6 35-40) and further configured to automatically terminate the computer application program with the smallest priority value (terminate one or more processing tasks of lower priority, Col.3 35-40).

Claim Rejections - 35 USC § 103

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5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Notenboom et al in view of Knowles.

Notenboom does not teach wherein the computer is a palmtop computing device.

Knowles does teach the computer is a palmtop computing device (palmtop computer, Col.3 30-35) for the purpose of allowing the system to be portable. Therefore, it would have been obvious to anyone of ordinary skill in the art to apply this feature of Knowles to Notenboom because this would allow these advantages to be used on a portable computer.

Claims 2,4,15-18,20,21-22,28-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Notenboom in view of Klug et al.

Regarding Claim 2,4,15-18,20,21-22,28-29 Notenboom et al teaches:

prior to terminating the computer application program (terminate one or more processing tasks of lower priority, Col.3 35-40).

Notenboom does not teach if the computer application program with the smallest priority value is in a modal state in which it waits for a response from a user, then providing a default response to the computer application (responsive to user input, Col.16 25-30 and by default, Col.6 35-40). Klug et al does teach providing a default response (default response is provided by a registrar application, Col.12 15-20) for the purpose of allowing the user to not have to provide

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a response. Therefore it would have been obvious to anyone of ordinary skill in the art to apply this feature of Klug to Notenboom because this would allow the operating system to close the application without requiring input from the user.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anwar Ahmad whose telephone number is (703) 305-8159.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Anwar Ahmad

October 1, 2002


MASID A. SANANKHAH
PRIMARY EXAMINER